

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A caliper pig for detecting an obstruction in a pipeline, having an elongated body including a front end and a rear end and comprising a front carrying guide ring at said front and a rear carrying guide ring at said rear end, said carrying guide rings being adapted for supporting the body in a coaxial sliding engagement with the interior of the pipeline and driving the body through the pipeline, the front end first, using the flow of fluid in the pipeline, said body further carrying a coaxial, generally disc-shaped, resiliently flexible detector operatively associated with transfer mechanism including a converting member movable relative to the body responsive to a generally axial force to transmit a mechanical impulse developed at the detector to activate and to deactivate an electrical signal producing device secured to said body, said detector having an outer diameter smaller than the inside diameter of the pipeline to define therewith a generally annular void having a predetermined radial clearance; said transfer mechanism being operatively disposed between a flexing portion of the detector and said converting member to transmit changes in the form of the deflector to said axial force, the converting member being disposed between said carrying rings and being located closer to the rear carrying guide ring than to the front carrying guide ring.

2. (Original) A caliper pig for detecting an obstruction in a pipeline, having an elongated body including a front end and a rear end and comprising carrying guide rings at said front and rear ends for supporting the body in a coaxial sliding engagement with the interior of the pipeline and

driving the body through the pipeline, the front end first, using the flow of fluid in the pipeline, said body further carrying a coaxial, generally disc-shaped, detector operatively associated with transfer mechanism including a converting member movable relative to the body responsive to a generally axial force to transmit a mechanical impulse developed at the detector to activate and to deactivate an electrical signal producing device secured to said body, wherein

- (i) said detector has an outer diameter smaller than the inside diameter of the pipeline to define therewith a generally annular void having a predetermined radial clearance;
- (ii) said transfer mechanism is operatively disposed between a flexing portion of the detector and said converting member to transmit changes in the form of the deflector to said axial force; and
- (iii) the converting member is a sleeve axially movably secured to and coaxial with said body.

3. (Original) The caliper pig of claim 2, wherein the detector is a resiliently flexible, segmented disc-shaped member fixedly secured to the body and comprising a plurality of segments separated from each other by generally radial separation lines.

4. (Original) The caliper pig of claim 3, wherein the transfer mechanism includes a series of links pivotably connected, at one end thereof, with said segments and, at the other end, with said

sleeve, whereby resilient flexing of one or more of said segments is transmitted to said sleeve as said generally axial force.

5. (Original) The caliper pig of claim 4, wherein said sleeve is axially movable along the body and carries switch actuation means.

6. (Original) The caliper pig of claim 1, wherein the detector is a resilient disc having a smaller diameter than the inside diameter of the pipeline.

7. (Original) The caliper pig of claim 6, wherein said detector is a resilient disc having a scratch recording layer bonded to a front face thereof turned toward said front end of the pig said layer possessing:

- (a) flexibility sufficient for the layer to follow resilient deformation of the resilient disc and return with the disc to a non-deformed state;
- (b) smoothness and softness sufficient for the layer to become and remain scratched when the detector engages an anomaly of a predetermined minimum radial magnitude and when the detector returns to said non-deformed state;

whereby, after passage of the caliper pig through the pipeline, the front face of the disc indicates the nature and magnitude of anomaly or anomalies encountered during the passage by way of scratched portions of the recording layer.

8. (Original) The caliper pig of claim 7, wherein said detector is a disc made from an elastomeric material and said scratch recording layer is a lead plate bonded to said front face of the disc.

9. (Original) The caliper pig of claim 8, wherein the outside diameter of the detector is about 80% of the inner diameter of the pipeline.

10. (Original) The caliper pig of claim 9, wherein the thickness of said lead plate is from about 1/16" to about 1/8", the thickness of said disc being from about 2" to about 12".

11. (Original) The caliper pig of claim 10, wherein the outside diameter of the disc and of the layer is about 8", the thickness of the lead plate is about 1/16" and the thickness of the disc is about 3/4".

12. (Original) The caliper pig of claim 7, wherein said resilient disc is a urethane disc and said scratch recording layer is a layer of paint.

13-23. (Withdrawn)

24. (New) The caliper pig of claim 2, wherein the converting member includes a sleeve movably secured to and coaxial with the body, said resilient disc being generally fixedly secured to said sleeve.